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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,143	02/27/2002	Trevor A. Deosaran	SP088.C6	8059
26111	7590	09/22/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC				
1100 NEW YORK AVENUE, N.W.				
WASHINGTON, DC 20005				
			ART UNIT	PAPER NUMBER
			2183	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/083,143	<b>Applicant(s)</b> DEOSARAN ET AL.	
	<b>Examiner</b> William M. Treat	<b>Art Unit</b> 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/1/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

1. Claims 12-20 are presented for examination.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-13, 16, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (Superscalar Microprocessor Design).
4. Johnson taught the system of claim 12 for renaming source registers of instructions stored in an instruction window of a processor, wherein the instruction window comprises a plurality of storage locations each of which stores a single instruction and wherein only a subset of the plurality of storage locations may be filled with new instructions in a single processor cycle (p. 46, section 3.4.2, first two paragraphs and p. 48, all but section designated 3.4.3), the system comprising: control logic that assigns one of a plurality of tags to a new instruction in the instruction window, each of said plurality of tags uniquely identifying a register for storing a result corresponding to an instruction in the instruction window; a data dependency checker that determines if said new instruction is dependent on another instruction in the instruction window by comparing a source register address of said new instruction with a destination register address of said other instruction in the instruction window; and tag assignment logic that outputs a renamed source register address for said new instruction, wherein said renamed source register address comprises a tag assigned to said other instruction in the instruction window if said new instruction is dependent on said other instruction (pp. 48-49, first two paragraphs of section 3.4.3).

5. As to claim 13, Johnson also taught the system of claim 12, further comprising: a first-in-first-out (FIFO) buffer that stores said plurality of tags; wherein said control logic assigns a tag from a head of said FIFO buffer to said new instruction in the instruction window (pp. 93-94, section 5.1.4, first 3 paragraphs and Fig. 9-2 on page 169).

6. As to claim 16, Johnson also taught the system of claim 12, wherein said data dependency checker comprises: a compare circuit that compares said source register address of said new instruction with said destination register address of said other instruction in the instruction window (p. 168, section 9.1.2, second paragraph, third sentence).

7. As to claim 19, Johnson also taught the system of claim 12, further comprising: a retirement unit that determines whether said new instruction has retired (pp. 49-50, section 3.4.3, paragraph beginning on p. 49 and continuing onto 50).

8. As to claim 20, Johnson also taught the system of claim 19, further comprising: logic that selects one of said register source address of said new instruction or said renamed register source address based on whether said new instruction has retired (p. 49, first two sentences of 2<sup>nd</sup> full paragraph).

9. Claims 12-14 are rejected under the judicially created doctrine of double patenting over claim 7 of U. S. Patent No. 5,590,295, claims 7 and 14 of U. S. Patent No. 6,138,231, claims 8-11 of U. S. Patent No. 6,272,617, and claims 10-12 of U. S. Patent No. 6,408,375 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

10. The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: They are all claiming the same basic register renaming system with a register file

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system which comprises a plurality of slots equal in number to a predetermined size of the instruction window, each of said plurality of slots containing a unique one of said plurality of tags, wherein an order defined by positions of said plurality of tags in said FIFO buffer corresponds to an order of instructions in the instruction window.

11. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

12. Claims 12, 17, and 18 are rejected under the judicially created doctrine of double patenting over claim 1 or 13 of U. S. Patent No. 5,809,276 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

13. The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: It is claiming the same basic register renaming system with a register file system which comprises a read data port and a read address port; wherein said renamed source register address stored in said register file is accessed on said read data port by providing said tag associated with said new instruction to said read address port.

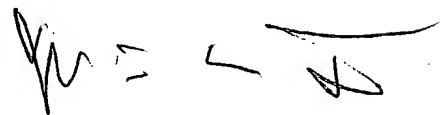
14. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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15. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Any inquiry concerning this communication should be directed to William M. Treat at telephone number 703 305 9699. After Oct. 12, 2004, the examiner's phone number should be changed to (571) 272-4175. The examiner works at home on Wednesdays but may normally be reached on Wednesdays by leaving a voice message using his office phone number. The examiner also works a flexible schedule but may normally be reached in the afternoon and evening on three of the four remaining weekdays.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WILLIAM M. TREAT**  
**PRIMARY EXAMINER**